GOVERNMENT OF INDIA
ATOMIC ENERGY
LOK SABHA

UNSTARRED QUESTION NO:567
ANSWERED ON:02.12.2015
Utility of Mineral Sand
Premachandran Shri N.K.

Will the Minister of ATOMIC ENERGY be pleased to state:

(a) whether the Government proposes to utilise the mineral sand containing radioactive elements available in the seashore of the country and if so, the details thereof;

(b)whether such mineral sand is useful for manufacturing value added projects;

(c)if so, the action taken by the Government for manufacturing value added projects from such mineral sand;

(d)whether the Government proposes to establish a permanent scientific comprehensive system for mining of such mineral sand in public sector and if so, the details thereof;

(e)whether the Government is aware that private sector industries are using suchradioactive mineral sand as raw material for their production; and

(f)if so, the action taken by the Government to avoid the misuse of such radioactive mineral sand?

Answer

THE MINISTER OF STATE FOR PERSONNEL, PUBLIC GRIEVANCES & PENSIONS AND PRIME MINISTER'S OFFICE (Dr. JITENDRA SINGH) :

(a)(b)&(c) Yes Sir. Indian Rare Earths Limited (IREL), a Public Sector Undertaking (PSU) under the administrative control of Department of Atomic Energy (DAE) has set up a 10,000 tons per annum (tpa) Monazite Processing Plant (MoPP) at OSCOM, Odisha to produce Nuclear Grade Ammonium Di-Uranate (NGADU) which is supplied to the Department while thorium is stockpiled in trenches for future use in the nuclear power programme of the Country. Mixed rare earth chloride (MRCL) produced during monazite processing is further processed to produce separated high pure rare earths at Rare Earths Division (RED), Aluva, Kerala while tri-sodium phosphate is sold in the open market.

IREL has entered into a licensing agreement for transfer of technology (LATOT) with Defence Metallurgical Research Laboratory, (DMRL), Hyderabad for transfer of Rare Earth (RE) based permanent magnet making technology developed by them. Further, IREL has also entered into a MoU with Bhabha Atomic Research Centre (BARC) for transfer of technology for production of RE metals.

(d) Yes Sir. Followed by the amendment of Mines and Minerals (Development &Regulations) Act, 1957 in January 2015 DAE has framed the drafts of "The Atomic Minerals Concession Rules 2015" and "The Atomic Minerals (Conservation & Development) Rules 2015" and forwarded the same to Ministry of Mines, New Delhi aimed at conserving the atomic minerals viz. ilmenite, rutile, leucoxene, zircon and monazite.

(e) There have been complaints about private sector industries using radioactive mineral sand as raw material for their production. However, nothing has been conclusively proven; Public Interest Writ Petitions have also been filed in the High Court of Judicature in Madras and the matter is sub-judice at present.

Monazite (Radioactive Mineral in the sand) is a mineral of strategic importance and right to process it is retained by the Government and no private party is permitted to process it. Since the other beach sand minerals and monazite (which contains thorium) occur together, companies handling beach sand minerals have to get licence under the Atomic Energy (Radiation Protection) Rules 2004 from the Atomic Energy Regulatory Board (AERB). As per the licensing conditions, the licencee, after separating the beach sand minerals has to dispose of the tailings, which contains monazite within in its company premises or as backfill, depending on the monazite content. These institutions are under strict regulatory control. They send quarterly reports to AERB stating the amount of tailings disposed off safely either in the premises or as backfill. Inspectors from AERB survey these areas to ensure that the licensing conditions are met.

Indian Rare Earths Limited a wholly owned Public Sector Undertaking of the Government of India (GOI) under Department of Atomic Energy is the only entity which has been permitted to produce and process monazite and handle it for domestic use as well as for export.

Apart from Thorium, Monazite contains rare earths too. On account of its radio-activity and other characteristics, extracting rare earths from monazite is commercially not-attractive, unless mix rare earths have to be separated as bye-product following extraction of Thorium. Thorium is required for the Indian Nuclear Programme in future and there is no other known demand for Thorium. Thus the allegation of use of Monazite by private parties may not be true.

(f)In view of the above does not arise.

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